

THE FIELD OF ELECTRICITY

Toledo's Plan of Applying the Trolley to Farm Wagons.

RUNNING DYNAMOS BY SOLAR HEAT

Harbor Electric Searchlight for the Harbor of San Francisco—Progress of Electric Power—Other Developments.

Colonel John C. Bonner, a prominent capitalist of Toledo, O., has just been given a franchise by the city council for the use of car tracks throughout the city of Toledo upon which he may run his patented "rail wagons" for a term of one year.

The rail truck is not materially different from the car truck in general use on electric railways, except that it is provided with special attachments for automatically gripping and supporting the wagon, which comprises its load.

The promoters of the enterprise have promised the city council of Toledo that convenient receiving and distributing stations will be located within the municipal boundaries. Bulk merchandise will be handled; parcel, mail and express matter also, the wagons making store-to-store collections and deliveries, accomplished by the wagons taking the full line of travel.

The inventor says: "This system will at once render accessible endless acres of fertile interior lands and open them up to the systematic energy of the thrifty market gardener, the dairyman and the fruit grower. Improved conditions will result to the truck farmer, who will no longer be obliged to spend his night in long weary drives in order to reach his market. Instead, his day's harvest will be transported to town during the night by electric rail wagon while man and horse refresh themselves in sleep."

The manufacturers of the wagon are already negotiating to place their vehicle in several New England states, where the country is threaded with electric railways.

Few people have any knowledge of the real cost of transportation by horse and wagon, or comprehend the amount of money expended needlessly every year through failure to provide proper roadways and modern tramways.

The table given herewith shows the results of actual observations on the part of mechanical engineers. The figures are the cost for moving one ton a distance of one mile on level roadways, under average conditions.

Solar Heat to Run Dynamoes. A prophesy has been made that it will not be long before there is a belt of smiling gardens and fields, dotted with palms, and inhabited by contented people, on both sides of the ancient river Nile, all the way from Cairo to Khartoum.

Water is not the only prospective source of power in Egypt and the Sudan. There is the solar energy to draw upon. Jansen calculated that thirty units of heat fall on every square meter of the earth in a minute, and assuming that only one-third of this passes through the atmosphere, ten units to the square yard are left at the surface of the ground, which is equivalent to nearly 8,000-foot pounds of mechanical energy.

Powerful Searchlight. The government has recently secured the most powerful electric searchlight in the world, and has placed it at the entrance to San Francisco bay, to be used in the protection of our western outpost in case of possible attack.

The light from this great projector is conservatively calculated to be equal to that of not less than 275,000,000 candles. The distance from which it can be seen is

FISH CULTIVATORS' MEETING

Twenty-Seventh Annual Session of the National Fisheries Society.

DUES REDUCED AND OFFICERS CHOSEN

Considerable Business of Interest to the Members Transacted During the Morning—Some of the Papers Read.

When the professional and scientific fishermen assembled at the hotel yesterday, they spent some time talking of the beauties of the exposition, which they visited last night, and there was nothing but praise from all of them for the wonders of the show. To such an extent is this true that the society is apt to shorten its session during the day, and give more time to looking over the exposition grounds.

When the regular work was taken up the question of reducing the annual dues was again considered, and when the vote was taken, the society decided to cut them down from \$3 to \$1.

The election of officers followed, with this result: President, George F. Peabody of Wisconsin; vice president, William H. Bowman of New York; treasurer, L. D. Huntington of New York; recording secretary, Herschel Whitaker of Michigan; corresponding secretary, J. E. Guckel of Ohio; executive committee: J. S. Dale of Pennsylvania, E. B. Bryant of Wisconsin, J. J. Shanahan of Ohio, F. N. Clark of Michigan, J. W. Titcomb of Vermont, W. L. May of Nebraska and Dr. J. A. Henshall of Montana.

Value of Microscope. J. J. Stranahan of Put-in-Bay read a paper on "The Microscope as Practically Applied to Fish Culture," in which he explained how, through the use of the microscope, the fish culturist could tell at once whether eggs were viable and thereafter save himself a large amount of time and some expense in trying to hatch unimpregnated eggs.

Work of the Society. J. E. Guckel of Toledo discussed "The Fish Culturist," the central idea of his paper being to show the work accomplished by the fisheries society from its organization on December 29, 1870, down to the present time.

New Ideas on Bass. W. J. O'Brien, superintendent of state hatcheries at South Bend, presented a paper on "The Propagation of Black Bass," in which he advanced some theories which were entirely new to most if not all of the delegates.

Support for Soldiers' Families. WASHINGTON, July 21.—Major John Byrne of New York, president of the Soldiers' and Sailors' Families' Protective association, is in Washington in the interest of a revival of the law of 1851, under which an allotment of the pay of soldiers and sailors was made to the families of volunteers

through the pay department of the army. He was in conference with the president, Secretary Alger, Adjutant General Corbin and Attorney General Griggs, all of whom feel a deep interest in the matter.

ROUTE FOR THE BOULEVARD. Preliminary Selection for the Right-of-Way for the Drive Has Been Accomplished.

The Southwest boulevard, a portion of the proposed boulevard system of the city which is to connect Hanscom and Riverview parks, seems to be approaching a stage where it will be transformed into a reality.

There have been but few objections to the boulevard scheme, and all the south-iders are enthusiastically in favor of it.

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THE OMAHA BEE'S

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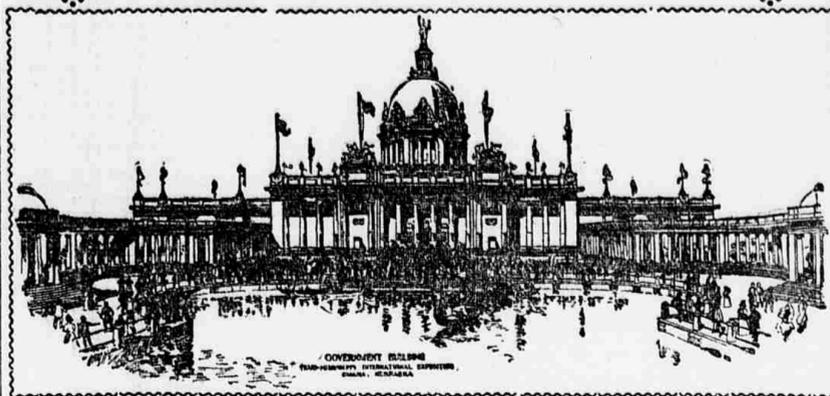
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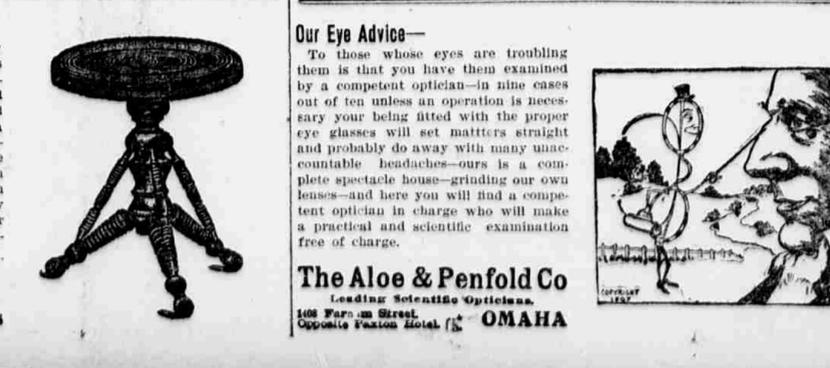
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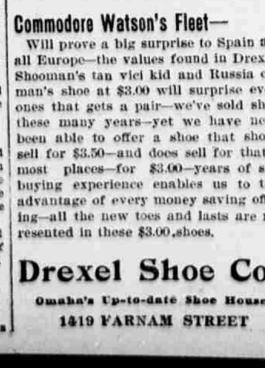
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Advertisement for This Piano Stool \$1.10—A. HOSPE, Music and Art, 1513 Douglas



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